equals 1.62 (both quotients are an approximation to the "golden ratio"value), it follows that the final result of the computation can easily be guessed. Thus for instance in the case
$\frac{8 \text { th term } \times 3}{9 \text { th term }}$
the answer should be $0.62 \times 3=1.86$ and in the case
$\frac{9 \text { th term } \times 2}{8 \text { th term }}$
the answer is $1.62 \times 2=3.24$.
If the properties of the recurrent sequences are unknown or too little known to the participants of the game, the guessing of the final results of their computations will have a startling effect.

[Continued from page 300.]

## FIBONACCI NUMBERS AND WATER POLLUTION CONTROL

Upon generating the number of solutions for varying $n$ the similarity of the series to the Fibonacci number series was noted.

| n | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| $\mathrm{~A}(\mathrm{n})$ | 1 | 3 | 8 | 21 | 55 | 144 |

And thus we concluded that the total number of economical solutions for n cities is

$$
\mathrm{A}(\mathrm{n})=\mathrm{F}_{2 \mathrm{n}}
$$

where $F_{k}$ stands for the $k^{\text {th }}$ Fibonacci number. This still does not indicate which of the $F_{2 n}$ solutions is the most economical one, but places an upper bound on the total number of economical solutions to be investigated.
$\rightarrow$

